This document was developed for the Proposed Mandatory GHG Reporting Rule. For the final document, please visit the final Mandatory Reporting of Greenhouse Gases Rule.

Petroleum Product Suppliers

Proposed Rule: Mandatory Reporting of Greenhouse Gases



Under the proposed Mandatory Reporting of Greenhouse Gases (GHGs) rule, all owners or operators of petroleum refineries and importers and exporters of petroleum products that meet the applicability requirements of the rule (see information sheet on General Provisions) would report the GHG emissions associated with the complete combustion or oxidation of the products they place in commerce. Refinery owners or operators, importers, exporters, and petroleum product suppliers would collect data on their products; calculate the potential GHG emissions associated with these products; and follow the specified procedures for ensuring data quality, amending missing data, and meeting recordkeeping and reporting requirements.

Owners or operators of refineries and petroleum product suppliers should also review the information sheet for petroleum refineries to identify other potential direct emissions that they may be required to report under the proposal.

How Is This Source Category Defined?

Under the proposal, suppliers of petroleum products consist of:

- **Petroleum refiners** that produce gasoline; kerosene; distillate fuel oils; residual fuel oils; lubricants; asphalt (bitumen); or other products through distillation of petroleum or through redistillation, cracking, or reforming of unfinished petroleum derivatives.
- **Importers** who bring petroleum products into the United States from a foreign country, including any blender or refiner of refined or semi-refined petroleum products. Importers include those who are primarily liable for the payment of any duties on the merchandise or an authorized agent acting on their behalf. Importers also include, as appropriate, the consignee, the importer of record, the actual owner, or the transferee.
- **Exporters** who transfer petroleum products from the United States to another country or to an affiliate in another country, including any blender or refiner of refined or semi-refined petroleum products. Exporters do not include those who transfer products to U.S. military bases and to ships for on-board use.

What GHGs Would Be Reported?

The proposal calls for suppliers of petroleum products to report annually:

- Carbon dioxide (CO₂) emissions that would result from the complete combustion or oxidation of each
 petroleum product and natural gas liquid produced, used as feedstock, imported, or exported during the
 calendar year.
- CO₂ emissions that would result from the complete combustion or oxidation of any biomass co-processed with petroleum feedstocks, for refiners.

Suppliers of petroleum products would not be required to report data on potential emissions of other GHGs from the use of their products, such as methane or hydrofluorocarbons (HFCs).

How Would GHG Emissions Be Calculated?

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Under the proposal, owners or operators may choose one of two methods to calculate potential CO₂ emissions from each petroleum product and natural gas liquid:

- Method 1: Using the default CO2 emission factors (metric tons CO2 emitted per barrel) provided in the proposed regulations for each petroleum product and natural gas liquid; or
- Method 2: Developing an emission factor for a given petroleum product or natural gas liquid using direct
 measurements of density and carbon share (i.e., percent carbon by mass), or using a combination of direct
 measurements and default factors for density and carbon share.

To calculate potential CO₂ emissions from biomass co-processed with petroleum feedstock, reporters would use a CO₂ emission factor (metric tons of CO₂ emitted per barrel) that is provided in the proposed regulations for each biomass product or feedstock.

In calculating total CO₂ emissions from all petroleum products and natural gas liquids, refiners would subtract the potential CO₂ emissions from non-crude feedstocks and biomass feedstocks that are co-processed or blended with petroleum feedstocks to produce a petroleum product.

What Information Would Be Reported?

In addition to the information required by the General Provisions at 40 CFR 98.3(c), the proposal calls for petroleum refiners to report the following information for each of their refineries:

- Total CO₂ emissions in metric tons from all petroleum products and natural gas liquids.
- CO₂ emissions in metric tons for each petroleum product and natural gas liquid (ex refinery gate), and the total volume of each.
- CO₂ emissions in metric tons for each petroleum product or natural gas liquid that enters the refinery annually as a feedstock to be further refined or otherwise used on site, and the total volume of each. If reporters cannot determine whether a feedstock is a petroleum product or a natural gas liquid, it would be reported as a petroleum product.
- CO₂ emissions in metric tons from each type of biomass feedstock to be co-processed with petroleum feedstocks, and the total volume of each biomass feedstock.
- The volume of the biomass-based component of each petroleum product that was produced by blending a petroleum-based product with a biomass-based product.
- The density and mass carbon share for any petroleum product or natural gas liquid for which these were directly measured as part of calculating CO₂ emissions, and the measurement method used.
- The total volume of each distillate fuel oil product or feedstock that contains less than 15 parts per million (ppm) of sulfur content and is free from marker solvent yellow 124 and dye solvent red 164.
- All of the following information for all crude oil feedstocks used at the refinery: batch volume (in standard barrels); API gravity of the batch; sulfur content of the batch; and country of origin.

Petroleum product importers and exporters would report all of the following information at the corporate level:

- CO₂ emissions in metric tons for each imported and exported petroleum product and natural gas liquid, and the total volume of each product. If reporters cannot determine whether a material is a petroleum product or a natural gas liquid, it would be reported as a petroleum product.
- The total sum of CO₂ emissions in metric tons for all imported and exported products.
- The volume of the biomass-based component of each reported petroleum product that was produced by blending petroleum-based and biomass-based products.
- The density and mass carbon share for any petroleum product or natural gas liquid that was directly measured to calculate CO₂ emissions, and the measurement method used.
- The total volume of each distillate fuel oil product that contains less than 15 ppm sulfur content and is free from marker solvent yellow 124 and dye solvent red 164.

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For More Information

This series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the proposed rule. However, these information sheets are not intended to be a substitution for the rule. Visit EPA's Web site (www.epa.gov/climatechange/emissions/ghgrulemaking.html) for more information, including the proposed preamble and rule and additional information sheets on specific industries, or go to www.regulations.gov> to access the rulemaking docket (EPA-HQ OAR-2008-0508). For questions that cannot be answered through the Web site or docket, call 1-877-GHG-1188.

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